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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/131,051	08/07/1998	DWIGHT D. JAMIESON	NTL-3.2.035/	7277
26345	7590	12/19/2003	EXAMINER	
GIBBONS, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE 1 RIVERFRONT PLAZA NEWARK, NJ 07102-5497			DINH, DUNG C	
			ART UNIT	PAPER NUMBER
			2153	22
DATE MAILED: 12/19/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/131,051

Applicant(s)

JAMIESON ET AL.

Examiner

Dung Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-10 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10 and 15-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Response to Arguments

Applicant's arguments filed 8/15/03 have been fully considered but they are not persuasive with respect to the teaching of Rekhter as state in the rejection below.

It is noted that claim 9 is currently dependent upon claim 7, which does not provide antecedent for the elements recited in claim 9. The correct parent claim seems to be 8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-10, 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rekhter et al. US patent 6,339,595 and further in view of Viswanathan et al. "Evolution of Multiprotocol Label Switching", IEEE Communications Magazine, May 1998.

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As per claim 1, Rekhter teaches a virtual private network (VPN V) which enables private communication over a shared network (formed by PE1, P1, P2, & PE2 in fig.1) between at least two private networks (a private network at the CE1 end and another private network at the CE2 end - see col.6 lines 17-26) comprising:

a first router (PE1) coupled to the shared network and configured to dynamically distribute first router VPN information across the shared network [see col.6 lines 42-47, col.16 lines 47-52, col.18 lines 18-26: CE1 sends information to PE1; col. 19 lines 5-11: PE1 sends the information to PE2; and col.20 lines 19-22: PE2 sends the information to CE2], wherein the first router VPN information includes a VPN identifier which is assigned to the first router (inherent from col.6 lines 41-46 and col.18 lines 32-38: "the SP assigns a different VPN identifier to each of its customers' VPNs");

a second router (CE2) coupled to the shared network and configured to dynamically distributed second router VPN information across the shared network (CE2 inherently transmits its information to PE2 for propagation through the shared network in a similar process as for CE1 to PE1);

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wherein the VPN identifier assigned to the first router (CE1) is the same as the VPN identifier of the second router (CE2) [see col.18 lines 33-36: "16-bit identifier V"].

Rekhter does not teach the shared network being a MPLS network. Rekhter discloses using a "tag switching" network [col.9 lines 45-51]. However, Viswanathan discloses that Tag switching is a prior technology to MPLS. Tag switching also does not have mechanism for multicast. MPLS is a rapidly emerging standard to enhance speed, scalability, and service provisioning capabilities in the Internet. [see abstract and p.170 col.2 "Prior Work"]. Hence it would have been obvious for one of ordinary skill in the art at the time of the invention to use MPLS network instead of tag switching with the teaching of Rekhter because it would have provided enhanced speed, scalability and service provisioning.

As per the limitation of establishing plural switched paths comprising multipoint-to-point and multipoint-to-multipoint, this is an inherent capability of the MPLS network [see. Viswanathan page 170]. It is apparent that Rekhter system as modified would has the capacity to establish plural label switch paths as claimed.

As per claim 2, Rekhter does not specifically disclose an network adaptation device connected to each of the routers. However, it is well known in the art to have a gateway or firewall

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controlling traffic in and out of a private network. Hence, it would have been obvious for one of ordinary skill in the art to have a 'network adaptation device' at each end connecting a private network to the corresponding router because it would have enhance the security of the private network.

As per claim 3, incorporating the adaptation device into the router would have been a matter of design choice. It would have been obvious for one of ordinary skill in the art to do so because it would have provided a more integrated solution, reducing the number of physical devices and connections.

As per claim 4, Rekhter teaches core routers in between [fig.1 PE1, P1, P2, PE2].

As per claims 15-16, the usage of label stacking to establish labeled switch paths is an inherent feature of MPLS network. [see Viswanathan p.168 col.2]. The processes recited are inherent in the operation of Rekhter system as modified.

As per claims 7-10 and 19-22, they are rejected under similar rationale as for claims 1-4 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (703) 305-9655. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM. The examiner can also be reached on alternate Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (703) 305-4792.

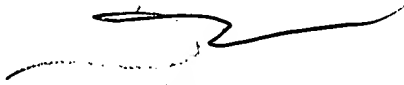
Any inquiry of a general nature or relating to the status of this application should be directed to the Group 2100 Customer Service whose telephone number is (703) 306-5631.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to: (703) 872-9306

Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington. VA, Fourth Floor (Receptionist).



Dung Dinh
Primary Examiner
December 14, 2003